AMENDMENTS TO THE SPECIFICATION

The following amendments to the specification are being made solely to correct informalities or typographical oversights. The amendments do not introduce any new matter.

A. Please replace paragraph 0015 with the following paragraph:

[0015] Figures 1 through 5 illustrate possible system configurations 101, 200 and 300 respectively, incorporating the heated roll 100 for drying printed media. The systems 101, 200, 300 may use any known paper transport mechanism to move the paper along its paper path, such as drive roller systems or belt transport systems with or without a vacuum hold-down assist. Figure 1 is a representative diagram of a system 100 that includes a drying slot 102 and a separate overcoating slot 104. In this example, a sheet of media 106 first receives a printed image in printzone 92. The backside 92' of the media 106 may either be a blank surface or a surface that has already been printed and dried. Following printing, the printed sheet 106 is first placed in the drying slot 102 and travels along a transport path 103 through a nip 108 formed between the heated roll 100 and a backing roll 110. Further, in this particular example, the sheet 106' travels through the nip 108 with its printed side against the heated roll 100 and its back side against the roll 110 so that the contact and heat from the heated roll 100 will dry the ink. Note that the printed side does not necessarily need to contact the heated roll 100 step and that the printed media may have any orientation that allows the heated roll 100 to dry the ink.

B. Please replace paragraph 0019 with the following paragraph:

[0019] Alternatively, increasing the heated roll 100 hardness and/or reducing the roll pressure using a pressure adjustment mechanism 111 that moves in the direction of vertical arrow 111' reduces the nip area, creating a system that is gentler to the printed sheet 106'. The system shown in Figure 1 may even be constructed without the nip roll

110 to eliminate the nip altogether; in this case, the sheet 106' preferably travels through the drying slot 102 printzone side 92 up, with its back side 92' against the heated roll 100, allowing the sheet 106' to dry through heat absorption. Reducing or eliminating nip pressure on the sheet does reduce the risk of damage, but it also tends to increase drying time and also may potentially complicate the paper path when the drying system is incorporated into a printer. Alternatively, the nip roll 110 may be constructed as a series of star-wheel rollers mounted on a common shaft, similar to ~~hose~~ those used in the output path of some inkjet printing mechanisms.

C. Please replace paragraph 0025 with the following paragraph:

[0025] Figure 2 illustrates the system configuration 200 during the drying step. The transport path 201 in this embodiment first passes the sheet 106 over the heated roll 100, with its back side 92' against the heated roll 100 and its printed side 92 facing the nip roll 110. Further, this embodiment incorporates a duplexer 202 that flips the printed sheet 106' between drying and coating steps, as will be explained in greater detail below. During this first pass, the nip roll 110 is spaced apart from the heated roll 100 so that the printed surface does not contact any roll surface. In this embodiment, heat absorbed by the sheet 106' and heat convection surrounding the sheet ~~106~~ 106' dries the printed surface on the sheet 106'. To improve convection and further decrease the drying time, an optional dryer 204, such as a fan, may circulate air near the space between the heated roll 100 and the nip roll 110. Once the sheet 106" is sufficiently dry, it may either be removed from the system 200 or recirculated through the system 200 for TTO application, as described below with respect to Figure 3.

D. Please replace paragraph 0026 with the following paragraph:

[0026] Figure 3 illustrates a repositioning process that flips and positions the sheet ~~106~~ 106" for TTO application. After the drying process shown in Figure 2, the sheet ~~106~~ 106" in this example is transported along a transport path 201' between a guide roll 130 and the duplexer 202 by way of a second guide roll 131, with the duplexer 202

further guiding the dried sheet 106" in the direction of transport path arrow 201'. ~~Element 202' illustrates a possible path of travel associated with duplexer 202.~~ Element 202' illustrates a possible path of travel associated with duplexer 202. Note that the duplexer 202 can reposition the sheet 106" in ways other than that illustrated in Figure 3. Once the entire sheet 106" clears the nip formed by the duplexer 202 and its associated guide roll 130, the printzone 92 will be facing the heated roll 100 during the TTO application process, as shown in Figure 4. Although Figure 3 illustrates one method for flipping the dried sheet 106", any duplexer can be incorporated into this embodiment to flip the sheet 106" in any manner.

E. Please replace paragraph 0028 with the following paragraph:

[0028] Because the printed sheet 106' passes through the same system 200 for both the drying and the TTO application process, a user does not have to reinsert the sheet 106' into the system through two different slots as is required in the embodiment shown in Figure 1. The embodiment shown in Figures 2, 3 and 4 ~~do allow~~ allows the sheet 106' to travel the same transport path 201 twice, decreasing the number of pages that may be printed, dried and coated per minute as well. Further, drying the sheet 106' without allowing contact between the printzone 92 and the heated roll 100 tends to increase drying time, decreasing the page per minute rate even further. Despite these potential disadvantages, the lack of contact between the heated roll 100 and the freshly-printed image greatly reduces the risk of image damage and ensures consistent, high-quality TTO coated images in applications where image quality is a higher priority than print speed and minimized system size.

F. Please replace paragraph 0030 with the following paragraph:

[0030] During TTO application, the dried printed sheet 106" continues to travel along the transport path 301, without retracing any previous path portions, through a nip 302 formed by the heated roll 100 and a second heated roll ~~204~~ 304. The TTO medium 112 is also trapped between the two heated rolls 100, 304, causing the TTO material 118 to

melt away from the substrate 120 and fuse to the printed side 92 of the sheet 106". As in the other embodiments, the TTO material 118 may be dispensed from a dispensing roll 122 and the substrate may be collected onto a take-up roll 124. The coated sheet 106"' may then continue along its transport path until it is ejected from the system 300. The dual functionality of the heater roll 100 and the continuous paper path in this embodiment provides a compact system design that dries and coats sheets quickly.

G. Please replace paragraph 0033 with the following paragraph:

[0033] The optimum parameters for the wait time between printing and fusing, the amount of nip pressure, transport speed through the system, and the heated roll temperatures for drying and fusing may all be varied to ensure that the system dries and coats printed media without compromising print quality. Experimental results have shown that a heated roll temperature between 90°C and 160°C dries the printed media without damaging image quality. The delay between the printing and the overcoating steps also affects the final print image quality; during testing, a 10 second delay tended to smear most images, while a 20 second delay resulted in varying print quality. A wait time of 40-60 seconds virtually eliminated smearing, although ~~some~~ there was dye migration in some cases. The optimum parameters may be different in different printing systems, for differing amounts of ink laid on the sheet 106 and for different media, and these specific parameters can be deduced by those of skill in the art without undue experimentation.

H. Please replace paragraph 0035 with the following paragraph:

[0035] Note that any of the embodiments described may be used ~~as~~ solely as a dryer or as a fuser without departing from the scope of the invention. For example, the invention may be used to apply TTO material to a document printed by a different printer, or even printed using a system other than an inkjet system.

It should be understood that various alternatives to the embodiments of the invention described herein may be employed in practicing the invention. It is intended that the following claims define the scope of the invention and that the method and apparatus within the scope of these claims and their equivalents be covered thereby.